27. A hypervelocity particle shield, comprising: a plurality of spaced apart flexible shield layers, at least one of which is made of a 3 flexible ceramic fabric; a resilient support layer between adjacent ones of the flexible shield layers, the resilient 4 support layer including at least one space qualified foath layer, wherein the at least one flexible 5 shield layer has an areal density that is substantially equal to a predetermined constant times a 6 7 hypervelocity particle's cubic density multiplied by its diameter; at least one thermal insulation layer disposed on the plurality of flexible shield layers; 8 a vented, abrasion resistant protective cover configured to enclose the flexible shield 9 layers and having an absorptivity to emissivity ratio/selected to provide a predetermined level of 10 thermal protection; and 11 fasteners attached to the protective cover and capable of releasably securing the flexible 12 shield layers to a structure to be protected. 13 Please add the following new claim! 35. The particle shield of claim 1, wherein the protective cover is optically absorptive. 1 36. A particle shield, comprising: 1 a plurality of flexible shield layers; 2 a resilient support layer between adjacent ones of the flexible shield layers; 3 a protective cover configured to enclose the flexible shield layers; a plurality of vent holes formed in a periphery of the protective cover; and 5 fasteners attached to the protective cover and capable of releasably securing the flexible 6 7 shield layers to a structure to be protected. 37. A particle shield, comprising: 1 a plurality of flexible shield layers; 2 a resilient support layer between adjacent ones of the flexible shield layers; 3 a protective cover configured/to enclose the flexible shield layers; 4